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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/648,830 | 08/25/2000 | Martin J. Steffensmeier | 00CR002/KE | 6297 |

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Rockwell Collins Inc
Intellectual Property Department
400 Collins Road NE M/S 124-323
Cedar Rapids, IA 52498

EXAMINER

NGUYEN, KEVIN M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2674

DATE MAILED: 09/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/648,830

Applicant(s)

STEFFENSMEIER ET AL.

Examiner

Kevin M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The amendment filed on 7/7/2003 is entered. The rejections of claims 1-20 are maintained.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 3, 5-8, 10, 12-15, 17, 19, 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Anderson et al (US 6,151,001).

As to claim 1, Anderson et al teaches a method of controlling a pixel for matrix addressed emissive display device, the method comprising: generating a video input corresponding to a static image to be displayed on a flat panel display (figure 7, column 4, lines 17-18); generating a signals as a function of the control data (col. 7, lines 30-36); providing the drive signals to the matrix to thereby energize the corresponding

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plasma display elements of the matrix in order to display the image on the matrix (see figure 7b and 8, col. 7, lines 54-65); altering the pixel such that the driver signals are altered to move the image one the matrix in manner which is undetectable to viewers (see figures 6a,b,c, column 6, line 66 through column 6, line 7).

As to claim 3, Anderson et al teaches the drive signals to plasma display panel (col. 7, lines 50-53).

As to claim 5, Anderson et al teaches defining an image origin for the image assigning the image origin for the image to an emissive display element in the matrix (figure 6a); the patterns are mixed up in space by reversing three space bits based on the origin bit 000 has been assigned (see figures 6b and 6c, col. 6, lines 3-7).

As to claim 6, Anderson et al teaches the origin bit 000 has been assigned (see figure 6a).

As to claim 7, Anderson et al teaches reassigning the pixels origin (figure 6a) to a different pixels in the matrix such that the pixels origin move relative to the display origin (three space bits weight from rows 5 to row 18 figure 6b and 6c relative to three space bits weight figure 6a).

As to claims 8 and 15, Anderson et al teaches a plasma panel having a graphics engine (figure 7a) a graphics engine adapted to generate control a pixel for matrix addressed emissive display device; display driver circuitry (figure 8) connected to the graphics engine and adapted to generate a drive signals as a function of the control data; the drive signals being provided the drive signals to the matrix to thereby energize the corresponding plasma display elements of the matrix in order to display the image

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on the matrix (see figure 7b and 8, col. 7, lines 54-65); the graphics engine alters the pixel such that the driver signals are altered to move the image one the matrix in manner which is undetectable to viewers (see figures 6a,b,c, column 6, line 66 through column 6, line 7).

As to claims 10, 17, Anderson et al teaches the drive signals to plasma display panel (col. 7, lines 50-53).

As to claims 12, 19, Anderson et al teaches defining an image origin for the image assigning the image origin for the image to an emissive display element in the matrix (figure 6a); the patterns are mixed up in space by reversing three space bits based on the origin bit 000 has been assigned (see figures 6b and 6c, col. 6, lines 3-7).

As to claim 13, Anderson et al teaches the origin bit 000 has been assigned (see figure 6a).

As to claims 14, 20, Anderson et al teaches reassigning the pixels origin (figure 6a) to a different pixels in the matrix such that the pixels origin move relative to the display origin (three space bits weight from rows 5 to row 18 figure 6b and 6c relative to three space bits weight figure 6a).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 2, 4, 9, 11, 16, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al in view of Hill, Jr. (US 5,790,096).

As to claims 2, 4, 9, 11, 16, 18, Anderson et al teaches all of the claimed limitation of claims 1, 8, 15, except for "the driver signals to a matrix of light emitting diodes and field effect display device. However, Hill, Jr. teaches a related microprocessor of flat panel data interface module plug-in that may be used. All flat panel display types including LCD electroluminescent, gas plasma, FED and other flat panel types may be supported (see column 7, lines 4-9 of Hill, Jr.). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the electroluminescent and field emission display device taught by Hill, Jr. for Anderson's flat display device because this would improve the quality of the image being displayed, while fabricating the flat display device at low cost, and saving power consumption (see column 3, lines 9-24 of Hill, Jr.).

Response to Arguments

5. Applicant's arguments filed 7/7/2003 have been fully considered but they are not persuasive.

In response to applicant's argument that claims 1, 8, 15 recite "substantially continuously moving the static image on the matrix in a manner which is substantially undetectable to viewers of the display device," at page 7, two last lines to page 8, line 1 and page 8, lines 12-16. This argument is not persuasive because Anderson et al's invention teaches "the display consists of 256 horizontal lines (a static image) list in the table of figure 4 (see column 5, lines 19-20); the grid line set is moved one position for

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each offset time until the grid line set has accessed each location in the list (see column 5, lines 27-29); the motion is not detected by the eye-brain nerve structure (column 5, lines 59-60).”

6. In response to applicant's argument that Anderson is nonanalogous art (page 8, line 18), it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Anderson et al is an analogous art because Anderson et al teaches a plasma display device which is one of the matrix addressed emissive display devices (see figure 7, column 7, line 53).

7. In response to applicant's arguments, the recitation “reducing luminance decay of emissive elements,” at page 8, line 22, has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

For these reasons, the rejections based on Anderson et al have been maintained.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on MON-THU from 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reached on **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)


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Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kevin M. Nguyen
Patent Examiner
Art Unit 2674

KN
September 17, 2003



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600